

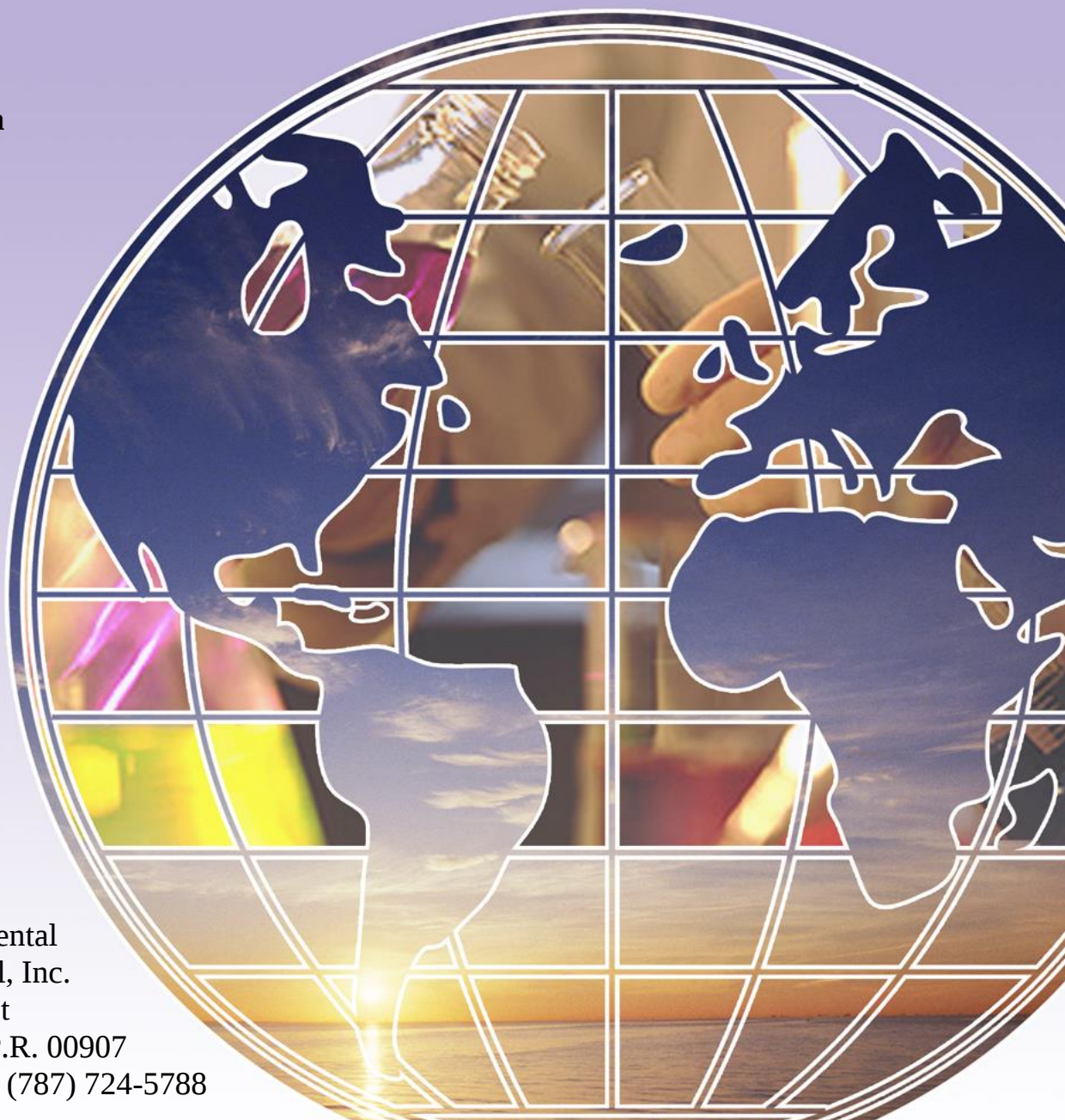


**LIMITED ENVIRONMENTAL SURVEY
FOR
LEAD BASED PAINT (LBP)
AND
ASBESTOS CONTAINING MATERIALS (ACM)
FOR
CDT ADJUNTAS
LOCATED ON #4, DR DEFENDINI STREET
ADJUNTAS, PUERTO RICO**

Prepared For:
Department of Health

Prepared By:

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LEAD



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I. SUMMARY

A limited survey for Lead Based Painted (LBP) Components was conducted by AES International for CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601 (Project #:77703, DI#151659). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The LBP limited investigation was conducted by Elme Rivera, an DRNA certified lead risk assessor. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 2012.

The scope of the survey included sampling of LBP suspected components listed on FEMA Lead Checklist for the project listed herein.

There were no LBP components present in the areas tested. However, LBP components were confirmed to be present in the following exterior areas which are not included in the FEMA's scope of work listed above.

Exterior

Emergency Area

Curb	Concrete	Yellow
Riser	Concrete	Yellow
Bollard	Metal	Yellow

**All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:77703, DI#151659).*

If remodeling activities will be conducted in the nearest future, it is required to remove all LBP materials prior to performance of said activities.

1.0 INTRODUCTION

A limited survey for Lead Based Painted (LBP) Components was conducted by AES International for CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601 (Project #:77703, DI#151659). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The LBP limited investigation was conducted by Elme Rivera, an DRNA certified lead risk assessor. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 1997, revised in 2012. The results are presented herein.

2.0 TESTING PROCEDURES

The testing was performed with an XRF instrument manufactured by Heuresis, Model Pb200i. The selected mode allows reference to the abatement level set at 1.0 mg/cm^2 . The results are reported at 95% confidence levels.

3.0 LEAD BASED PAINT TESTING METHODOLOGY

The hazard level of lead in paint has been determined by the department of Housing & Urban development as 1.0 mg/cm^2 , as measured by XRF, or AAS (Atomic Absorption Spectroscopy), or 0.5% by weight (or 5000 ppm) as measured by AAS, or Inductive Coupled Plasma (ICP). The same level was adopted by EPA regulations published in 1992, under Title X.

The only lead-based paint testing protocol officially available at this time was published by HUD initially in 1990, revised in 1991 and finalized in 1995 (see above HUD reference). A revised chapter 7 was published in 1997 and finalized in 2012. In accordance to the new protocol, almost all surfaces present in the units have to be tested. The above guidelines were used to perform lead based-paint testing for this project.

The main steps involved in a single-family inspection are:

1. Perform inventory of all testing combinations
2. Select painted area to be tested
3. Perform XRF testing (including calibration checks)
4. Collect and analyze paint chip samples, for inconclusive results.
5. Classify XRF and paint chips results
6. Review and evaluate the data
7. Report findings

AES International personnel classify each XRF lead reading as positive, negative, or inconclusive. This classification is based on manufacturer XRF performance characteristic sheet (PCS), for each substrate. Samples and/or additional readings are taken from inconclusive areas.

Calibration verification of the instrument was performed prior to beginning of daily task, when the instrument was turned on, and at the end of the day. The verification was conducted on a NIST standard of 1.0 mg/cm². Acceptance criteria used was ± 0.3 mg/cm². The data for calibration verification is attached in Appendix II.

Initially, a visual inspection was performed using FEMA lead based paint checklist and DDD document to identify materials listed to be sampled. Subsequently, readings were taken from suspected materials identified in FEMA's lead checklist (see Appendix II).

The identification of tested walls is based on HUD guidelines as follow:

Wall A-entrance wall

Walls B, C, and D-sequential walls, clockwise from A.

At the completion of the testing, ten (10) surfaces were retested as to assess precision of the testing. Statistical calculations performed on test-retest results suggest that the results are within the tolerance limits and therefore acceptable.

4.0 RESULTS

4.1 Results of XRF inspection

The results of the tested components are shown in Appendix II. Twenty-two (22) XRF readings were taken (see also summary). There were no LBP components present in the areas indicated in the scope of FEMA's work.

5.0 CONCLUSIONS

An LBP limited survey was conducted for CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601. LBP components were detected. Some painted surfaces may contain levels of lead below 1.0 mg/cm², which could create lead dust, or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding.

This report shall be kept by the owner and all future owners for the life of the buildings. A copy of the relevant report shall be given to each tenant, buyer or lessor, as to comply with federal requirements for disclosure under lead disclosure rule of 1996 (see also section 1018 of Title X).

The LBP survey conducted did not address all suspected LBP present in the building but only materials listed by FEMA under the "FEMA Lead and Asbestos Checklist" and (when available) the Damage Description and Dimension (DDD) document. Consequently negative, or positive findings refer only to the areas and materials tested from selected locations.



Elme Rivera, DRNA Lead Risk Assessor
Lic#: LBPRA-21722-207

**Table 1. Summary of LBP Positive Components at CDT Adjuntas,
Adjuntas, Puerto Rico.**

Structure	Room	Components	Substrate	Color	Quantity
<u>CDT Adjuntas</u>					
	Exterior				
		Emergency Area			
		Curb	Concrete	Yellow	
		Riser	Concrete	Yellow	
		Bollard	Metal	Yellow	

*All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:77703, DI#151659).

Appendix I





AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Analytical Environmental Services International, Inc.

611 Monserrate St. Suite 2 Santurce, PR 00907

Laboratory ID: LAP-102702

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS



INDUSTRIAL HYGIENE

Accreditation Expires: February 01, 2023



ENVIRONMENTAL LEAD

Accreditation Expires: February 01, 2023



ENVIRONMENTAL MICROBIOLOGY

Accreditation Expires:



FOOD

Accreditation Expires:



UNIQUE SCOPES

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC



GOBIERNO DE PUERTO RICO

Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

AES International, Inc.

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como **Firma** para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-06922-014

Fecha de emisión: Abril 6, 2022

Fecha de Expiración: Abril 5, 2023



Jose Roque Juliá
Jefe

División Desperdicios Tóxicos

Lead Risk Assessor Credentials



Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2015

MANUFACTURER AND MODEL:

Make: *Heuresis*
Models: *Model Pb200i*
Source: *⁵⁷Co, 5 mCi (nominal – new source)*

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm ² (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm² for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm² at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm². Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm² NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1\text{st} + 2\text{nd} + 3\text{rd} + 4\text{th} + 5\text{th} + 6\text{th Reading})/6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm². The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm ²)	Mean Reading Time (seconds)	Standard Deviation (seconds)
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
≥ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm²), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at <http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997>.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.

Appendix II



Lead and Asbestos Checklist (428 Projects)

Project #: 77703 DI #: 151659

(1) Does the facility meet one of the following criteria?

Asbestos		Lead	
☒	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	☒	Building constructed before 1978 and a Construction Permit is triggered based on the below permit checklist
☐	Building constructed before 1990 and project requires a demolition permit	☐	Building constructed before 1978 and a Demolition permit is required
☐	Applicant has documentation confirming the presence of asbestos Name of attachment:	☐	Applicant has documentation confirming presence of lead paint Name of attachment:
	None This DI does not qualify for asbestos abatement estimating for 428 project		None This DI does not qualify for asbestos abatement estimating for 428 project

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	Location in the Building (specify the room)	Quantity
Interior and Exterior Finishes		
Exterior/interior paint		
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)		
Fire retardant paint		
Other fire protection materials		
Roads and Bridges		
Road sign paints (Roads, Bridge Parapets)		
Traffic paint (Yellow, white, blue, etc.)		
Other		
Explain:	Exterior, Full cap metal roof parapet top flashing (siding): 971 LF x 6 Inches x 6 Inches	

Asbestos		
Suspect Material	Location in the Building (specify the room)	Quantity
Roofing Materials		
Roof and nonroof coatings		
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		27,069.00 SF
Interior and Exterior Finishes		
Vinyl floor tiles		
Vinyl floor tile glue/ adhesives		
Ceiling tiles	Main Floor	32,104.00 SF
Millboard		
Insulation		
Plasters	Building Facade	508 SF
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall		
Electrical/HVAC Components		
Duct and return pipeline wrapping	Main Floor	700 SF
Duct and return pipeline wrapping	Building Exterior, Refrigeration lines insulation	100 FT long
Duct and return pipeline wrapping	Building Exterior, 1 each of Exterior ductwork (intake) insulation	52 Feet long X 24 Inch X 24 Inch
Duct and return pipeline wrapping	Building Exterior, Galvanized steel, exterior ventilation ductwork.	55 FT long x 2 FT wide x 2 FT high
Boilers		
Sealants		
Extruded sealant tapes		
High-grade electrical paper		
Insulation for friction parts		
Insulation for furnaces and refrigerators		

Glues, Adhesives, Mastic, HVAC Asbestos Sealants		
<i>Other</i>		
Explain:		

Appendix III



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Departamento de Salud de Puerto Rico

Date: 10/13/22

Project Name: CDT Adjuntas

Inspector: Elme Rivera

Address: Adjuntas, Puerto Rico

XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
1					Calibration	1.0	
2					Calibration	1.0	
3					Calibration	1.0	
4	Exterior	Exterior	Concrete	Light Blue	Wall A	0.1	
5	Exterior	Exterior	Concrete	Light Blue	Wall B	0.2	
6	Exterior	Exterior	Concrete	Light Blue	Wall C	0.1	
7	Exterior	Exterior	Concrete	Light Blue	Wall D	0.2	
8	Exterior	Exterior	Concrete	Gray	Trim	0.1	
9	Exterior	Exterior	Concrete	White	Trim	0.2	
10	Exterior	Exterior	Concrete	Gray	Column	0.1	
11	Exterior	Exterior	Concrete	Light Blue	Decorative Blocks	0.2	
12	Exterior	Exterior	Metal	Gray	Handrail	0.1	
13	Exterior	Exterior, Emergency Area	Concrete	Yellow	Curb	2.3	
14	Exterior	Exterior, Emergency Area	Concrete	Yellow	Riser	2.1	
15	Exterior	Exterior, Emergency Area	Metal	Yellow	Bollard	1.9	
16	Exterior	Exterior, Emergency Area	Concrete	Blue	Curb	0.1	
17	Exterior	Exterior	Metal	White	Window Frame	0.1	

Approved By: **Ady Padan Ph.D.**

Date: 10/13/2022

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Departamento de Salud de Puerto Rico

Date: 10/13/22

Project Name: CDT Adjuntas

Inspector: Elme Rivera

Address: Adjuntas, Puerto Rico

XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
18	Exterior	Exterior	Metal	White	Window	0.2	
19	Exterior	Exterior	Metal	Cream	Door Frame	0.1	
20	Exterior	Exterior	Metal	Cream	Door	0.2	
21	Exterior	Exterior	Metal	White	Window Railing	0.1	
22	Interior	1-39	Concrete	Light Gray	Wall B	0.1	
23	Interior	1-39	Concrete	White	Ceiling	0.3	
24	Interior	Bathroom 6	Ceramic	Yellow	Lower Wall Tile	0.4	
25	Interior	1-54	Ceramic	Brown	Floor Tile	0.1	
26					Calibration	1.0	
27					Calibration	1.0	
28					Calibration	1.0	
RETESTING							
29	Exterior	Exterior, Emergency Area	Concrete	Blue	Curb	0.1.	
30	Exterior	Exterior	Metal	White	Window Frame	0.1.	
31	Exterior	Exterior	Metal	White	Window	0.1	
32	Exterior	Exterior	Metal	Cream	Door Frame	0.2	
33	Exterior	Exterior	Metal	Cream	Door	0.1	

Approved By: Ady Padan Ph.D.

Date: 10/13/2022

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Departamento de Salud de Puerto Rico

Date: 10/13/22

Project Name: CDT Adjuntas

Inspector: Elme Rivera

Address: Adjuntas, Puerto Rico

XRF Serial No.: 3115

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
34	Exterior	Exterior	Metal	White	Window Railing	0.2	
35	Interior	1-39	Concrete	Light Gray	Wall B	0.3	
36	Interior	1-39	Concrete	White	Ceiling	0.1	
37	Interior	Bathroom 6	Ceramic	Yellow	Lower Wall Tile	0.2	
38	Interior	1-54	Ceramic	Brown	Floor Tile	0.1	
39					Calibration	1.1	
40					Calibration	1.0	
41					Calibration	1.0	

Approved By: **Ady Padan Ph.D.**

Date: 10/13/2022

Appendix IV



Selective Photos



**General View of CDT Adjuntas
Dr. Defendini Street, #4
Adjuntas, Puerto Rico**



**General View of CDT Adjuntas
Dr. Defendini Street, #4
Adjuntas, Puerto Rico**



**Yellow Concrete Curb, Riser and Bollard
Painted with LBP
Emergency Area, Exterior**

**All positive findings are not part of scope of work listed under FEMA DISASTER 4339DR-PR and 4473DR-PR contract (Project #:77703, DI#151659).*

ASBESTOS



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APPENDIX III - Physical Assessment Inspection Form

APPENDIX IV - Analytical Results

APPENDIX V - Selective Photos

I. SUMMARY

Analytical Environmental Services International, Inc (AES International) was contracted to perform a limited Asbestos Containing Materials (ACM) survey for CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601 (Project #:77703, DI#:151659). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The ACM limited inspection was conducted by Elme Rivera, a DRNA certified asbestos inspector.

The scope of the survey included sampling and physical assessments of ACM suspected materials listed on FEMA Asbestos Checklist.

During the survey, twenty-nine (29) samples were collected from suspected materials. Samples collected were analyzed by Polarized Light Microscopy (PLM) for asbestos fibers. ACM was identified in the following materials:

- Black Mastic on HVAC insulation. Material is classified as miscellaneous, category I, non-friable, ACM. According to FEMA estimates, 700 sq.ft of the material on the main floor and each of the ductwork insulation (intake) on the exterior (52'x 24''x 24'') will be affected.
- Ceiling Tiles 2'x2' and 2'x4'. Material is classified as miscellaneous, category I, non-friable, ACM. According to FEMA estimates, 32,104 sq.ft of this material will be affected.

Additional suspected materials were observed to be present in the building, outside of the FEMA's cope of work. These materials include VFT 12"x12" with mastic, undersink spray on, boiler insulation. In addition, there is an area on the Southeast side of the building where roofing material was not sampled as the roof treatment was applied approximately two years ago and is under warranty.

If demolition/remodeling activities will be conducted in the nearest future it is recommended to remove all ACM known, suspected, or presumed present within the structure, as to comply with NESHAP/DRNA requirements.

1.0 INTRODUCTION

Analytical Environmental Services International, Inc (AES International) was contracted to perform an Asbestos Containing Materials (ACM) survey for CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601 (Project #:77703, DI#:151659). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract.

The ACM inspection was conducted by Elme Rivera, a DRNA/AHERA certified asbestos inspector (see Appendix I for credentials). The scope of the survey included sampling of suspected ACM and analysis of samples collected.

Samples collected were sent to AES International Inc., a NVLAP accredited laboratory located in Santurce, Puerto Rico. Samples were analyzed by Polarized Light Microscopy method (PLM), in accordance with EPA recommended procedures. The samples are defined as asbestos containing materials (ACM) if they contain more than 1% asbestos.

2.0 GENERAL BACKGROUND

Asbestos was used in the construction industry from 1900 to 1989. It is still being used today in various products. The health effects of asbestos have been studied since the 1930's. More health studies have been conducted in asbestos than any other natural substance. The mere presence of asbestos containing materials does not necessarily constitute a health hazard. However, when these materials become disturbed from building renovation, maintenance, or other everyday activities that allow fibers to be released into the environment, a potential hazard does exist.

The relationship between exposure level and health risk is very complex. Although this relationship is not completely understood, asbestos exposure has been associated with various types of lung diseases including a debilitating lung disease called ASBESTOSIS; a rare cancer of chest called MESOTHELIOMA; and cancers of the esophagus, stomach, colon and other organs. Asbestosis is not fatal; it is, however, incurable. One who has it cannot breathe easily, and physical activity becomes limited. MESOTHELIOMA is 100% fatal, as there is no cure. These diseases can be directly linked to asbestos because of the mineral particles that can be found in the lining of the lungs and stomach, since the body cannot absorb these minerals. Tests have determined that asbestos can cause cancer, but scientists disagree on the number of asbestos fibers that must be inhaled to cause cancer. The nose filters out all visible particles. Therefore, only the microscopic fibers are the ones who cause the problems.

Studies indicate different health effect resulting from exposure to chrysotile asbestos versus exposure to the amphibole form of asbestos. The latter, which include tremolite, amosite, actinolite, anthophyllite and crocidolite have more significant health impact than chrysotile.

Some scientists cite studies concluding that is the size of the fibers deposited in the lungs that result in cancer. Long, thin fibers, greater than 8 microns in length and less than 0.25 microns in diameter show the highest potential of cancer development.

2.1 National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA's rules concerning the application, removal, and disposal of ACM, as well as manufacturing, spraying and fabricating of ACM were issued under the asbestos NESHAP regulation (U.S. EPA National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M, October 30, 1987). The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. The NESHAP rule usually requires owners or operators to have all friable ACM removed before the building is demolished and may require its removal before renovation. If friable ACM shall be disturbed, the NESHAP rule may require appropriate work practices, or procedures for emission control. The rule states that any ACM, which may become friable, poses a potential hazard that should be addressed.

A revised NESHAP ruling was released on November 20, 1990, effective February 20, 1991, which includes as the responsibility of the owner, or operator, to "prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II non-friable ACM." (40 CFR, Part 61, National Emission Standards for hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990).

3.0 PROJECT IDENTIFICATION/DESCRIPTION

The area investigated consists of building materials shown in FEMA's Asbestos Check list and DDD list (when available). The lists are attached in Appendix II.

4.0 SAMPLING METHODS

The materials listed in the FEMA's Asbestos Checklist were visually inspected and identified based on Photos provided and DDD List (see Appendix II). Accordingly, twenty-nine (29) samples were collected from suspected ACM. Samples were collected from roof built-up and flashing, exterior façade, ceiling tiles, TSI, fiber glass and black mastic on HVAC.

5.0 SAMPLING RESULTS

Location of materials and results are shown in the physical assessment form in Appendix III. Analytical results of samples collected are shown in Appendix IV. The results are presented according to functional areas tested. The suspected samples collected were analyzed by Polarized Light Microscopy (PLM) for asbestos fibers.

Asbestos fibers above 1% area (ACM) were identified in six (6) samples collected from blackmastic on HVAC and ceiling tiles. (see selective photos in Appendix V).

Additional suspected materials were observed to be present in the building, outside of the FEMA's cope of work. These materials include VFT 12"x12" with mastic, undersink spray on, boiler insulation. In addition, there is an area on the Southeast side of the building where

roofing material was not sampled as the roof treatment was applied approximately two years ago and is under warranty.

6.0 CONCLUSIONS

ACM were detected during a limited survey conducted CDT Adjuntas located on Defendini Street #4, Adjuntas, Puerto Rico, 00601 (Project #:77703, DI#:151659). The investigation is part of FEMA DISASTER 4339DR-PR and 4473DR-PR contract. Results are presented in the summary.

The ACM sampling relates to surfaces accessible and not covered by rigid barriers. Should any materials hidden under surfaces, or architectural components be present, they are to be assumed as ACM.

The ACM survey conducted did not address all suspected ACM present in the building but only materials listed by FEMA under the “FEMA Lead and Asbestos Checklist” and (when available) the Damage Description and Dimension (DDD) document. Consequently negative, or positive findings refer only to the areas and materials tested from selected locations.



Elme Rivera, DRNA Asbestos Inspector
Lic#: ASB-1221-0694-SI

Table 1. Summary of Asbestos Containing Materials (ACM) for CDT Adjuntas located in Adjuntas, Puerto Rico.

Building	Sample ID	Description	Result (Percentage of Asbestos)
CDT Adjuntas	CDT-A-ER23	Black Mastic on HVAC, Area 1-87	3% CHR
	CDT-A-ER24	Black Mastic on HVAC, Area 1-88	2% CHR
	CDT-A-ER25	Black Mastic on HVAC from Area 1-54	3% CHR
	CDT-A-ER26	Ceiling Tile 2'x 4' (Transite) from Area 1-54	15% CHR
	CDT-A-ER27	Ceiling Tile 2'x 4' (Transite) from Area 1-55	10% CHR
	CDT-A-ER28	Ceiling Tile 2'x 4' (Transite) from Area 1-59	10% CHR

Appendix I



United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200051-0

AES International

Santurce, PR

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2022-01-01 through 2022-12-31

Effective Dates



A handwritten signature in blue ink, reading "Dana S. Laman".

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AES International

611 Monserrate

Santurce, PR 00907

Mr. Ady Padan

Phone: 787-722-0220 Fax: 787-724-5788

Email: yotal@bellsouth.net

<http://www.aesipr.org>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200051-0

Bulk Asbestos Analysis

Code

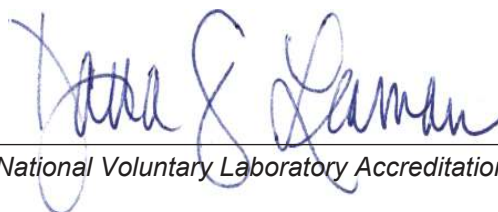
Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

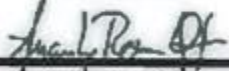
18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials



For the National Voluntary Laboratory Accreditation Program

Asbestos Inspector Credentials

	TARJETA DE REGISTRO PARA LA REMOCION DE ASBESTO
ASB-1221-0694-SI	Esta tarjeta autoriza a:
Número de Registro	Elme Rivera Pérez
19-Nov-2022	Inspector
Fecha de vencimiento	A trabajar en la remoción de asbesto en P.R. Esta persona NO es un empleado del DRNA.
	 Firma Autorizada - Departamento Recursos Naturales y Ambientales

Appendix II



Lead and Asbestos Checklist (428 Projects)

Project #: 77703 DI #: 151659

(1) Does the facility meet one of the following criteria?

Asbestos		Lead	
☒	Building constructed before 1990 and a Construction Permit is triggered based on the below permit checklist	☒	Building constructed before 1978 and a Construction Permit is triggered based on the below permit checklist
☐	Building constructed before 1990 and project requires a demolition permit	☐	Building constructed before 1978 and a Demolition permit is required
☐	Applicant has documentation confirming the presence of asbestos Name of attachment:	☐	Applicant has documentation confirming presence of lead paint Name of attachment:
	None This DI does not qualify for asbestos abatement estimating for 428 project		None This DI does not qualify for asbestos abatement estimating for 428 project

(2) Review DDD to identify suspect materials

Lead		
Suspect Material	Location in the Building (specify the room)	Quantity
Interior and Exterior Finishes		
Exterior/interior paint		
Ceramic Tile (Wall, Floor)		
Ceramic equipment (Bathtubs, Sinks)		
Metal components (Doors, Windows)		
Fire retardant paint		
Other fire protection materials		
Roads and Bridges		
Road sign paints (Roads, Bridge Parapets)		
Traffic paint (Yellow, white, blue, etc.)		
Other		
Explain:	Exterior, Full cap metal roof parapet top flashing (siding): 971 LF x 6 Inches x 6 Inches	

Asbestos		
Suspect Material	Location in the Building (specify the room)	Quantity
Roofing Materials		
Roof and nonroof coatings		
Roofing felt		
Roofing stucco		
Roof panels		
Asphaltic, Bituminous, SBS, Mastic Sealant, polyolefins		27,069.00 SF
Interior and Exterior Finishes		
Vinyl floor tiles		
Vinyl floor tile glue/ adhesives		
Ceiling tiles	Main Floor	32,104.00 SF
Millboard		
Insulation		
Plasters	Building Facade	508 SF
Mastic		
Textured paints (simulated stucco)		
Block filler paints (masonry coating)		
Cement products		
Drywall		
Electrical/HVAC Components		
Duct and return pipeline wrapping	Main Floor	700 SF
Duct and return pipeline wrapping	Building Exterior, Refrigeration lines insulation	100 FT long
Duct and return pipeline wrapping	Building Exterior, 1 each of Exterior ductwork (intake) insulation	52 Feet long X 24 Inch X 24 Inch
Duct and return pipeline wrapping	Building Exterior, Galvanized steel, exterior ventilation ductwork.	55 FT long x 2 FT wide x 2 FT high
Boilers		
Sealants		
Extruded sealant tapes		
High-grade electrical paper		
Insulation for friction parts		
Insulation for furnaces and refrigerators		

Glues, Adhesives, Mastic, HVAC Asbestos Sealants		
<i>Other</i>		
Explain:		

Appendix III



ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico**
 Project Name: **CDT Adjuntas**
 Inspection Date: **10/12/2022**

Structure: **CDT Adjuntas**
 Page: **1** of **5**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER1	Roof Built-Up from Center East Side	Misc.	No	NF	Roof	ND		X	
CDT-A-ER2	Roof Flashing from Southeast Side	Misc.	No	NF	Roof	ND		X	
CDT-A-ER3	Roof Built-Up from West Side of Roof	Misc.	No	NF	Roof	ND		X	
CDT-A-ER4	Roof Built-Up from Lower Level, West Side	Misc.	No	NF	Roof	ND		X	
CDT-A-ER5	Roof Flashing from Lower Level, West Side	Misc.	No	NF	Roof	ND		X	
CDT-A-ER6	Roof Flashing from Metal Roof above Patio Area (1-26) next to Health Educator	Misc.	No	NF	Roof	ND		X	

Inspected by: **Elme Rivera**

Date: **10/12/2022**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

****Sampling Points are based on floor plans provided and titled (Planta Existente, Cambios a Realizar and Organigrama Plan de Desastre)**

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico**
 Project Name: **CDT Adjuntas**
 Inspection Date: **10/12/2022**

Structure: **CDT Adjuntas**
 Page: **2** of **5**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER7	Sample from Exterior Surface Façade, Area 1-83 (Patio next to Office)	Surf.	No	NF	Exterior Walls	ND		X	
CDT-A-ER8	Sample from Exterior Surface Façade, North Wall	Surf.	No	NF	Exterior Walls	ND		X	
CDT-A-ER9	Sample from Exterior Surface Façade, Northwest Wall	Surf.	No	NF	Exterior Walls	ND		X	
CDT-A-ER10	Sample from Exterior Surface Façade, Southwest Wall	Surf.	No	NF	Exterior Walls	ND		X	
CDT-A-ER11	Sample from Exterior Surface Façade, Southeast Wall	Surf.	No	NF	Exterior Walls	ND		X	
CDT-A-ER12	Ceiling Tile 2'x 4' Metal Cover from Area 1-91 (Lavanderia)	Misc.	No	NF	1-89, 1-90, 1-91	ND		X	

Inspected by: **Elme Rivera**

Date: **10/12/2022**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged friable miscellaneous ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

****Sampling Points are based on floor plans provided and titled (Planta Existente, Cambios a Realizar and Organigrama Plan de Desastre)**

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico**
 Project Name: **CDT Adjuntas**
 Inspection Date: **10/12/2022**

Structure: **CDT Adjuntas**
 Page: **3** of **5**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER13	Ceiling Tile 2'x 4' Metal Cover from Area 1-90 (Comedor)	Misc.	No	NF	1-89, 1-90, 1-91	ND		X	
CDT-A-ER14	Ceiling Tile 2'x 4' Metal Cover from Area 1-89 (Cocina)	Misc.	No	NF	1-89, 1-90, 1-91	ND		X	
CDT-A-ER15	TSI Pipe 2" from Area 1-88 (Pasillo Salida)	TSI	No	NF	All Building	ND		X	
CDT-A-ER16	TSI Pipe 2" from Area 1-88 (Pasillo Salida)	TSI	No	NF	All Building	ND		X	
CDT-A-ER17	TSI Pipe 4" from Area 1-88 (Pasillo Salida)	TSI	No	NF	All Building	ND		X	
CDT-A-ER18	TSI Pipe 4" from Area 1-87 (Pasillo Entrada Principal, atras)	TSI	No	NF	All Building	ND		X	

Inspected by: **Elme Rivera**

Date: **10/12/2022**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

****Sampling Points are based on floor plans provided and titled (Planta Existente, Cambios a Realizar and Organigrama Plan de Desastre)**

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico**
 Project Name: **CDT Adjuntas**
 Inspection Date: **10/12/2022**

Structure: **CDT Adjuntas**
 Page: **4** of **5**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER19	Elbow Pipe 4" from Area 1-87 (Pasillo Entrada Principal atras)	TSI	No	NF	All Building	ND		X	
CDT-A-ER20	Ceiling Tile 2'x 4' from Area 1-69 (Pasillo Entrada Principal frente)	Misc.	No	NF	All Building	ND		X	
CDT-A-ER21	Ceiling Tile 2'x 4' from Area 1-45 (Lab next to AC Mech Room)	Misc.	No	NF	All Building	ND		X	
CDT-A-ER22	Ceiling Tile 2'x 4' from Area 1-12 (Sub Waiting)	Misc.	No	NF	All Building	ND		X	
CDT-A-ER23	Black Mastic on HVAC, Area 1-87 (Pasillo Entrada Principal atras)	Misc.	Yes	NF	All Building	3% CHR		X	
CDT-A-ER24	Black Mastic on HVAC, Area 1-88 (Pasillo Salida)	Misc.	Yes	NF	All Building	2% CHR		X	

Inspected by: **Elme Rivera**

Date: **10/12/2022**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

****Sampling Points are based on floor plans provided and titled (Planta Existente, Cambios a Realizar and Organigrama Plan de Desastre)**

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Departamento de Salud de Puerto Rico**
 Project Name: **CDT Adjuntas**
 Inspection Date: **10/12/2022**

Structure: **CDT Adjuntas**
 Page: **5** of **5**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
CDT-A-ER25	Black Mastic on HVAC from Area 1-54 (Hallway next to Sterile Supply Room)	Misc.	Yes	NF	All Building	3% CHR		X	
CDT-A-ER26	Ceiling Tile 2'x 4' (Transite) from Area 1-54 (Hallway next to Sterile Supply Room)	Misc.	Yes	NF	1-54, 55, 56, 57, 58, 59, 60	15% CHR		X	
CDT-A-ER27	Ceiling Tile 2'x 4' (Transite) from Area 1-55 (Clean Up Facilities)	Misc.	Yes	NF	1-54, 55, 56, 57, 58, 59, 60	10% CHR		X	
CDT-A-ER28	Ceiling Tile 2'x 4' (Transite) from Area 1-59 (Cirugia Menor)	Misc.	Yes	NF	1-54, 55, 56, 57, 58, 59, 60	10% CHR		X	
CDT-A-ER29	Fiber Glass Ceiling Tile 2'x 4' from Area 1-61 (Nurses Lockers Room)	Misc.	No	NF		ND		X	

There are other materials not mentioned that need to be sampled: VFT 12"x 12" with mastic, under sink spray on, counter tops, window caulking and spray on ceiling (stucco), boiler. Note: there is an area on the Southeast side of Roof covered with new treatment, done 2 years ago.

Inspected by: **Elme Rivera**

Date: **10/12/2022**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged friable miscellaneous ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

****Sampling Points are based on floor plans provided and titled (Planta Existente, Cambios a Realizar and Organigrama Plan de Desastre)**

Appendix IV





ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.01 B22100019.01.A CDT-A-ER1 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Roof Built-Up from Center East Side Comments: Paint Included as Binders	Semi-Hard, Bituminous with Aggregates Other - Fibers and Paint Black	No		Cellulose 5	Bitumen 65 Sand/Aggregates 10 Binders/Paint 20
B22100019.02 B22100019.02.A CDT-A-ER2 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Roof Flashing from Southeast Side Comments: Paint Included as Binders	Semi-Hard, Glue with Aggregates Other - Fibers and Paint Pink	No		Cellulose 2 Synthetic 5	Sand/Aggregates 15 Glue 58 Binders/Paint 20
B22100019.03 B22100019.03.A CDT-A-ER3 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Roof Built-Up from West Side of Roof Comments: Paint Included as Binders	Semi-Hard, Glue with Aggregates Other - Black Mastic and Paint Pink	No		Cellulose 2 Synthetic 8	Bitumen 15 Sand/Aggregates 25 Glue 30 Binders/Paint 20

MICROANALYST:

[Jessica Garcia]

QUALITY CONTROL:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.04 B22100019.04.A CDT-A-ER4 Layer % of Total :100%	Semi-Hard, Bituminous with Aggregates, Fibers Other - Paint and Glue Black	No		Cellulose 5 Synthetic 3	Bitumen 72 Sand/Aggregates 10 Glue 5 Binders/Paint 5
Date Analyzed: 10/13/2022 Sample Location: Roof Built-Up from Lower Level, West Side Comments: Paint Included as Binders					
B22100019.05 B22100019.05.A CDT-A-ER5 Layer % of Total :100%	Semi-Hard, Bituminous with Aggregates, Fibers Other - Paint and Glue Black	No		Cellulose 3 Synthetic 2	Bitumen 60 Sand/Aggregates 15 Glue 10 Binders/Paint 10
Date Analyzed: 10/13/2022 Sample Location: Roof Flashing from Lower Level, West Side Comments: Paint Included as Binders					
B22100019.06 B22100019.06.A CDT-A-ER6 Layer % of Total :100%	Semi-Hard, Bituminous with Aggregates Other - Fibers and Paint Black	No		Cellulose 3 Glass Fibers 10	Bitumen 47 Sand/Aggregates 10 Binders/Paint 30
Date Analyzed: 10/13/2022 Sample Location: Roof Flashing from Metal Roof above Patio Area (1-26) Comments: Paint Included as Binders					

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.07 B22100019.07.A CDT-A-ER7 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Sample from Exterior Surface Façade, Area 1-83 Comments: Paint Included as Binders	Semi-Hard, Paint with Aggregates and Fibers Blue	No		Cellulose 2	Sand/Aggregates 15 Binders/Paint 83
B22100019.08 B22100019.08.A CDT-A-ER8 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Sample from Exterior Surface Façade, North Wall Comments: Paint Included as Binders	Semi-Hard, Paint with Aggregates and Fibers Blue	No		Cellulose 2	Sand/Aggregates 30 Binders/Paint 68
B22100019.09 B22100019.09.A CDT-A-ER9 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Sample from Exterior Surface Façade, Northwest Wall Comments: Paint Included as Binders	Semi-Hard, Paint with Aggregates and Fibers Blue	No		Cellulose 2	Sand/Aggregates 35 Binders/Paint 63

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

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611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.10 B22100019.10.A CDT-A-ER10 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Sample from Exterior Surface Façade, Southwest Wall Comments: Paint Included as Binders	Semi-Hard, Paint with Aggregates and Fibers Blue	No		Cellulose 3	Sand/Aggregates 35 Binders/Paint 62
B22100019.11 B22100019.11.A CDT-A-ER11 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Sample from Exterior Surface Façade, Southeast Wall Comments: Paint Included as Binders	Semi-Hard, Paint with Aggregates and Fibers Blue	No		Cellulose 2	Sand/Aggregates 35 Binders/Paint 63
B22100019.12 B22100019.12.A CDT-A-ER12 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' Metal Cover from Area 1-91 Comments: Paint Included as Binders	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10 Mineral Wool 5	Perlite 30 Expanded Glass 20 Binders/Paint 10

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

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Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.13 B22100019.13.A CDT-A-ER13 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlite with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 20 Glass Fibers 10 Mineral Wool 5	Perlite 35 Expanded Glass 20 Binders/Paint 10
Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' Metal Cover from Area 1-90 Comments: Paint Included as Binders					
B22100019.14 B22100019.14.A CDT-A-ER14 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlite with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 25 Glass Fibers 10 Mineral Wool 5	Perlite 35 Expanded Glass 20 Binders/Paint 5
Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' Metal Cover from Area 1-89 Comments: Paint Included as Binders					
B22100019.15 B22100019.15.A CDT-A-ER15 Layer % of Total :100%	Semi-Hard, Fibrous with Aluminum Other - Paint and Glue Yellow	No		Cellulose 5 Glass Fibers 65	Aluminum 10 Glue 5 Binders/Paint 15
Date Analyzed: 10/13/2022 Sample Location: TSI Pipe 2" from Area 1-88 Comments: Paint Included as Binders					

MICROANALYST:

[Jessica Garcia]

QUALITY CONTROL:

[Elme Rivera]

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REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.16 B22100019.16.A CDT-A-ER16 Layer % of Total :100%	Semi-Hard, Fibrous with Aluminum Other - Paint and Fibers Yellow	No		Cellulose 2 Glass Fibers 78	Aluminum 5 Glue 5 Binders/Paint 10
Date Analyzed: 10/13/2022 Sample Location: TSI Pipe 2" from Area 1-88 Comments: Paint Included as Binders					
B22100019.17 B22100019.17.A CDT-A-ER17 Layer % of Total :100%	Semi-Hard, Fibrous with Aluminum Other - Paint and Glue Yellow	No		Cellulose 3 Glass Fibers 77	Aluminum 5 Glue 5 Binders/Paint 10
Date Analyzed: 10/13/2022 Sample Location: TSI Pipe 4" from Area 1-88 Comments: Paint Included as Binders					
B22100019.18 B22100019.18.A CDT-A-ER18 Layer % of Total :100%	Semi-Hard, Fibrous with Aluminum Other - Paint and Glue Yellow	No		Cellulose 2 Glass Fibers 70	Aluminum 10 Glue 8 Binders/Paint 10
Date Analyzed: 10/13/2022 Sample Location: TSI Pipe 4" from Area 1-87 Comments: Paint Included as Binders					

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

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RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.19 B22100019.19.A CDT-A-ER19 Layer % of Total :100%	Semi-Hard, Fibrous with Aluminum Other - Paint and Glue Yellow	No		Cellulose 5 Glass Fibers 80	Aluminum 5 Glue 5 Binders/Paint 5

Date Analyzed: 10/13/2022

Sample Location: Elbow Pipe 4" from Area 1-87

Comments:

Paint Included as Binders

B22100019.20 B22100019.20.A CDT-A-ER20 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 20 Glass Fibers 10 Mineral Wool 5	Perlite 35 Expanded Glass 20 Binders/Paint 10
---	--	----	--	---	---

Date Analyzed: 10/13/2022

Sample Location: Ceiling Tile 2'x 4' from Area 1-69

Comments:

Paint Included as Binders

B22100019.21 B22100019.21.A CDT-A-ER21 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 30 Glass Fibers 13 Mineral Wool 2	Perlite 35 Expanded Glass 15 Binders/Paint 5
---	--	----	--	---	--

Date Analyzed: 10/13/2022

Sample Location: Ceiling Tile 2'x 4' from Area 1-45

Comments:

Paint Included as Binders

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

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REPORT NUMBER



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POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.22 B22100019.22.A CDT-A-ER22 Layer % of Total :100%	Semi-Hard, Silty to Fibrous to Perlitic with Other - Expanded Glass and Paint Lt. Gray	No		Cellulose 20 Glass Fibers 10 Mineral Wool 5	Perlite 35 Expanded Glass 15 Binders/Paint 15
Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' from Area 1-12 Comments: Paint Included as Binders					
B22100019.23 B22100019.23.A CDT-A-ER23 Layer % of Total :100%	Semi-Hard, Bituminous with Aluminum Other - and Fibers Black	Yes	Chrysotile 3	Cellulose 15 Glass Fibers 20	Aluminum 15 Bitumen 47
Date Analyzed: 10/13/2022 Sample Location: Black Mastic on HVAC, Area 1-87 Comments: Asbestos Found in Bitumen					
B22100019.24 B22100019.24.A CDT-A-ER24 Layer % of Total :100%	Semi-Hard, Bituminous with Aluminum Other - and Fibers Black	Yes	Chrysotile 2	Cellulose 25 Glass Fibers 10	Aluminum 25 Bitumen 38
Date Analyzed: 10/13/2022 Sample Location: Black Mastic on HVAC, Area 1-88 Comments:					

MICROANALYST:

[Jessica Garcia]

QUALITY CONTROL:

[Elme Rivera]

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Job ID: B22100019



REPORT NUMBER



RP22102101

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.25 B22100019.25.A CDT-A-ER25 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Black Mastic on HVAC from Area 1-54 Comments: Asbestos Found in Bitumen	Semi-Hard, Fibrous with Aluminum Other - and Black Mastic Pink	Yes	Chrysotile 3	Cellulose 20 Glass Fibers 30	Aluminum 15 Bitumen 32
B22100019.26 B22100019.26.A CDT-A-ER26 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' (Transite) from Area 1-54 Comments: Paint Included as Binders	Hard, Compact with Aggregates, Fibers Other - and Paint Lt. Gray	Yes	Chrysotile 15		Sand/Aggregates 25 Binders/Paint 60
B22100019.27 B22100019.27.A CDT-A-ER27 Layer % of Total :100% Date Analyzed: 10/13/2022 Sample Location: Ceiling Tile 2'x 4' (Transite) from Area 1-55 Comments: Paint Included as Binders	Hard, Compact with Aggregates, Fibers Other - and Paint Lt. Gray	Yes	Chrysotile 10		Sand/Aggregates 25 Binders/Paint 65

MICROANALYST:

[Jessica Garcia]

QUALITY CONTROL:

[Elme Rivera]

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REPORT NUMBER

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POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Departamento de Salud de Puerto Rico	Date Collected:	10/12/2022
Project Name:	CDT Adjuntas	Date Received:	10/13/2022
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B22100019.28 B22100019.28.A CDT-A-ER28 Layer % of Total :100%	Hard, Compact with Aggregates, Fibers Other - and Paint Lt. Gray	Yes	Chrysotile 10		Sand/Aggregates 25 Binders/Paint 65

Date Analyzed: 10/13/2022

Sample Location: Ceiling Tile 2'x 4' (Transite) from Area 1-59

Comments:

Paint Included as Binders

B22100019.29 B22100019.29.A CDT-A-ER29 Layer % of Total :100%	Soft, Fibrous With Paint Yellow	No		Glass Fibers 95	Binders/Paint 5
---	------------------------------------	----	--	-----------------	-----------------

Date Analyzed: 10/13/2022

Sample Location: Fiber Glass Ceiling Tile 2'x 4' from Area 1-61

Comments:

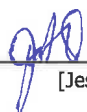
Paint Included as Binders

Comments:

For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.

Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

MICROANALYST:


[Jessica Garcia]

QUALITY CONTROL:


[Elme Rivera]

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Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Departamento de Salud de Puerto Rico

Address:

Contact:

Phone/Fax:

Project Name: CDT Adjuntas

Site Location: Adjuntas, Puerto Rico

Samplers Name: Elme Rivera

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
CDT-A-021	See Hazard Assessment	10/12/22		✓			B22100019 .01
2				✓			.02
3				✓			.03
4				✓			.04
5				✓			.05
6				✓			.06
7				✓			.07
8				✓			.08
9				✓			.09
10				✓			.10
11				✓			.11
12				✓			.12
CDT-A-023	See Hazard Assessment	10/12/22		✓			.13

Turnaround Time:

Normal:

☒

Rush:

☒

Relinquished By:

Date/ Time:

Received By:

Date/ Time:

Relinquished By:

Date/ Time:

Received By:

Date/ Time:

Delivered Directly to Lab:

Shipped:

Method of Shipment:

Lab. Recipient:

Date:

*Job ID: B22100019



Departamento de Salud de Puerto Rico

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Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Departamento de Salud de Puerto Rico

Address:

Contact:

Phone/Fax:

Project Name: CDT Adjuntas

Site Location: Adjuntas, Puerto Rico

Samplers Name: Elme Rivera

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
CDT-A-12014	See Hand Assgmt	10/12/22		✓			B22100019
15				✓			.15
16				✓			.16
17				✓			.17
18				✓			.18
19				✓			.19
20				✓			.20
21				✓			.21
22				✓			.22
23				✓			.23
24				✓			.24
25				✓			.25
CDT-A-12020	See Hand Assgmt	10/12/22		✓			.26

Turnaround Time:

Normal: ☒Rush: ☐Relinquished By: *[Signature]*

Date/ Time:

Received By: *[Signature]*

Date/ Time:

Relinquished By:

Date/ Time:

Received By:

Date/ Time:

Delivered Directly to Lab: ☐Shipped: ☐

Method of Shipment:

Lab. Recipient:

Date:

*Job ID: B22100019



Departamento de Salud de Puerto Rico

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Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Departamento de Salud de Puerto Rico

Address: _____

Contact: _____

Phone/Fax: _____

Project Name: CDT Adjuntas

Site Location: Adjuntas, Puerto Rico

Samplers Name: Elme Rivera

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
CDT-ADJ-27	See Hazard Assessment	10/2/22		✓			B22100019 .27
CDT-ADJ-28	"	"		✓			.28
CDT-ADJ-29	See Hazard Assessment	10/13/22		✓			.29

Turnaround Time:

Normal: ☒Rush: ☐

Relinquished By:	Delivered Directly to Lab: ☐ Shipped: ☐
Date/ Time: 10/13/22 16:30	Method of Shipment: _____
Received By:	Lab. Recipient: _____
Date/ Time: 10/13/22 7:30	Date: _____
Relinquished By: _____	
Date/ Time: _____	
Received By: _____	
Date/ Time: _____	

*Job ID: B22100019



Departamento de Salud de Puerto Rico

Appendix V



Selective Photos



**General View of CDT Adjuntas
Dr. Defendini Street, #4
Adjuntas, Puerto Rico**



**General View of CDT Adjuntas
Dr. Defendini Street, #4
Adjuntas, Puerto Rico**



**Typical Asbestos Containing Black Mastic
on HVAC**

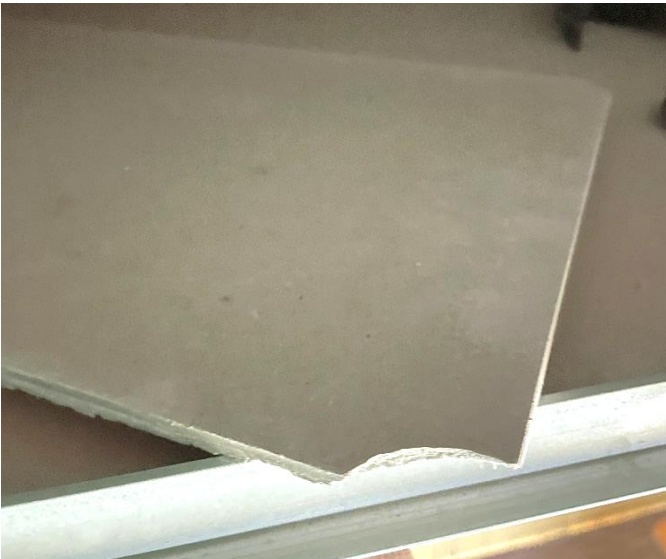
Selective Photos



**Typical Asbestos Containing Black Mastic
on HVAC**



**Typical Asbestos Containing Ceiling Tiles
2'x 4' (Transite)**



**Typical Asbestos Containing Ceiling Tiles
2'x 4' (Transite)**